Consistent Software

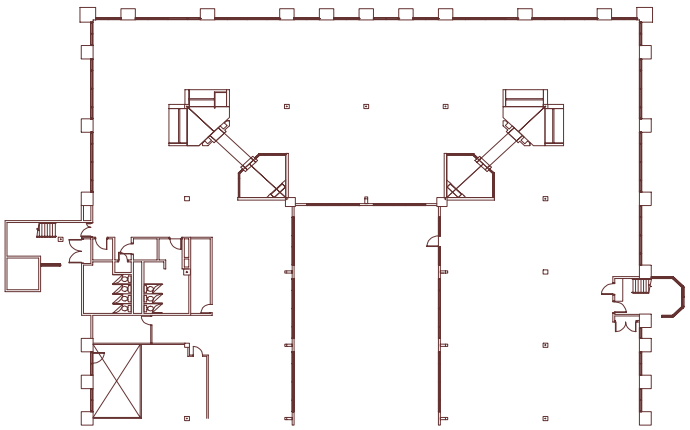
HOW TO BE A MAGICIAN

Introduction

Please, look through this document very carefully. As you know there can't be magic without training. PlanTracer no doubt is a magic tool, but you need to prepare your floor plans first, tune the recognition settings and create proper Template Library. Here you will find some advices and tips to make your job easier and to achieve satisfactory results.

How to prepare a floor plan for 'magic' recognition

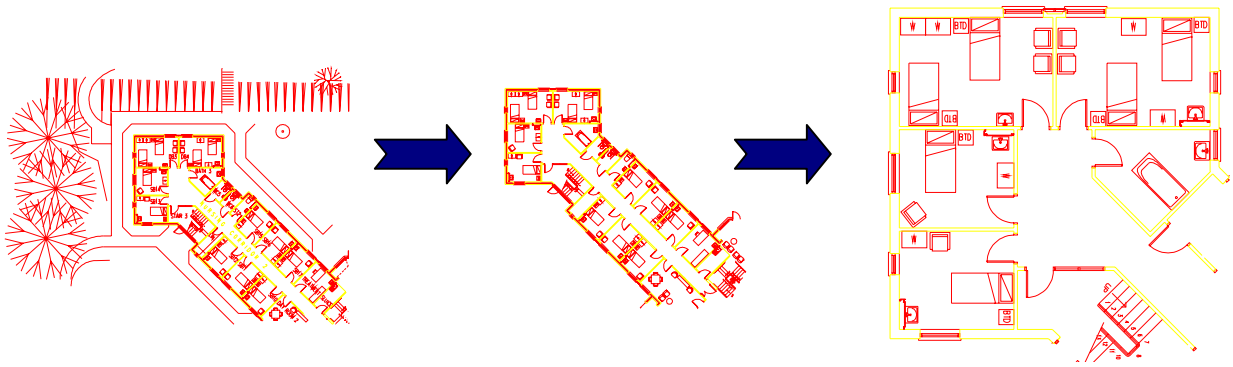
1. First of all you need to find out if it is necessary to apply PlanTracer or not. In general, we recommend to use PlanTracer (for recognition) when you have a floor plan with a number of rooms (more than 5 at least) and there are a lot of similar objects or you have a number of floor plans, which contains similar objects. Look on an example, for which it is not expedient to apply PlanTracer. For FM applications you can use PlanTracer in any cases, as for these purposes PlanTracer is an unique tool to make your system – 'intelligent'.



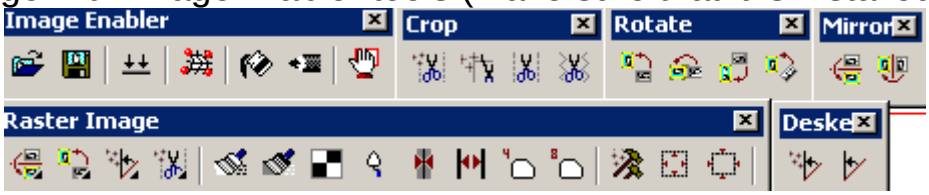
2. After you decide to process your drawing by PlanTracer, you need to prepare it.

- First, copy the drawing into specially prepared AutoCAD template, where you are usually used to work (with loaded object styles, defined layers and specially prepared layers for PlanTracer – PT_Walls, PT_Doors, etc.)

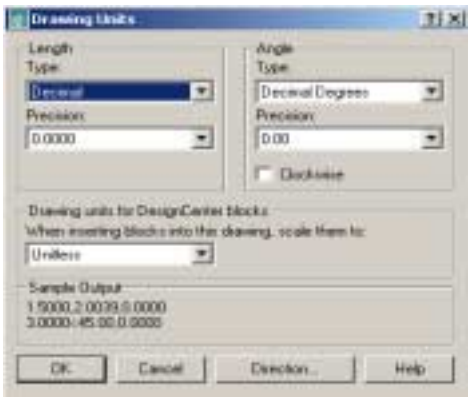
- Freeze in AutoCAD options or select in PlanTracer Options\Layers Switch all layers you are not going to use during recognition (cable trays, texts, outside objects, etc.)

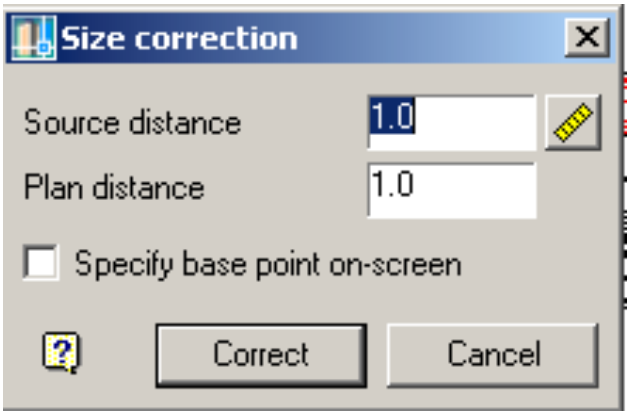


- For raster images use Insert Raster command. If required, clean and edit your image with ImageEnabler tools (make sure that it is installed)



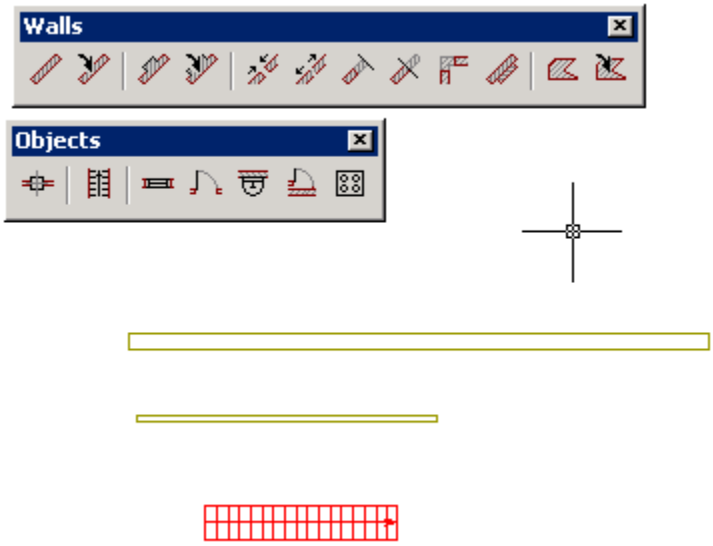
- Set proper units and scale you floor plan





- Define properties of your future objects (look on your initial plan and measure your objects' prototypes)

3. Thirdly you need to prepare PlanTracer templates (draw walls with PlanTracer tools) that will be used in recognition and which will be placed in Template Library. You should place different types of objects on different layers (walls on PT_Walls, doors on PT_Doors, etc.), so you can be able to manage your model by Show/Hide Toolbar buttons. You should also prepare search patterns for raster images and for low quality vector prototypes (actually you can use the same prototypes for templates and search patterns). Remember, if you wish to use Objects toolbar to draw your objects you should have at least 1 object of that type in your Template Library (except for walls and stairs). The height of your objects will be standard – 2.75.

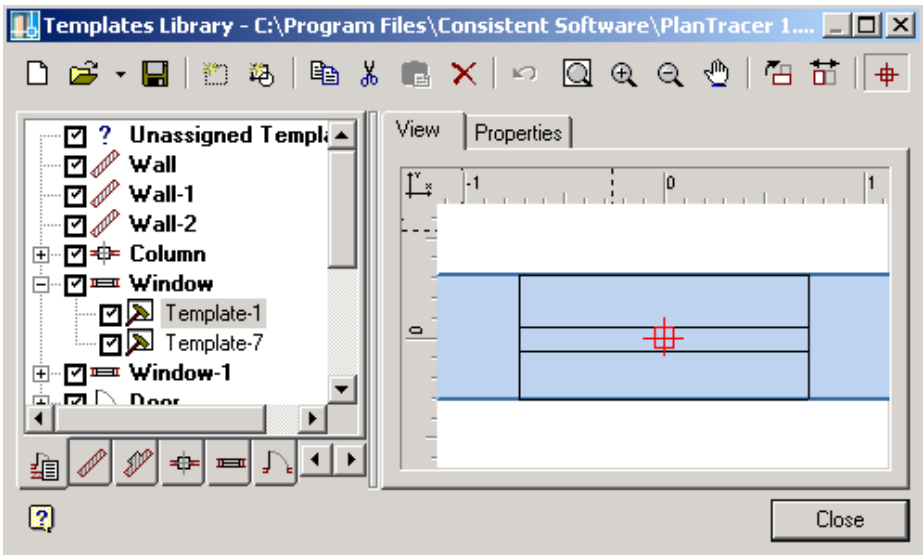


NB! Your can't control 3D object properties (position of windows, doors, so on).

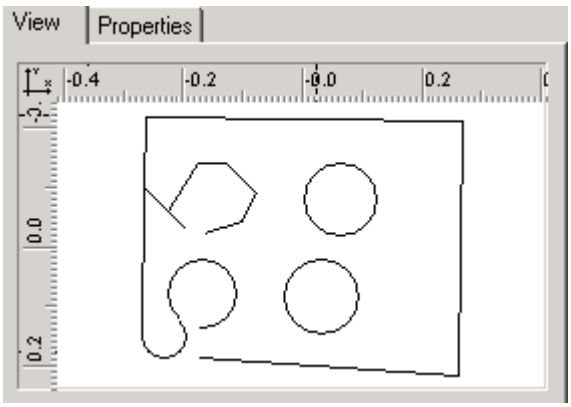
How to prepare Template Library

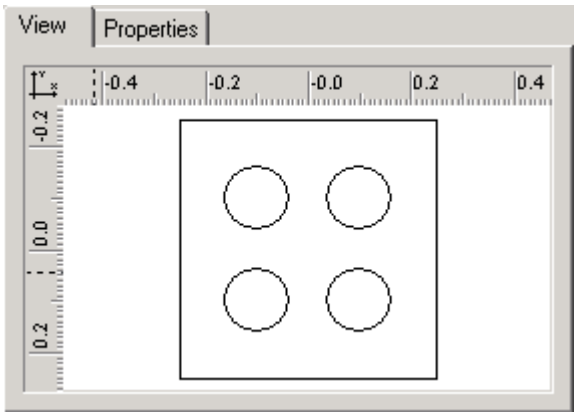
Open the Template Library dialog. Use Quick Start to do it correctly (if necessary). Remember the following:

- You can use and update Libraries that were prepared for other drawings
- Don't forget to save Template Library as a *.VRL file
- Walls templates don't have search patterns
- Assign at least one search pattern for other objects' templates
- Set names of templates for convenience
- Specify the insertion points for a template and its patterns similar to each other



- Assign as many patterns of the template as necessary for proper recognition





- Set properties for templates
- Select all the objects that you are not going to recognize and place them to the unassigned templates section

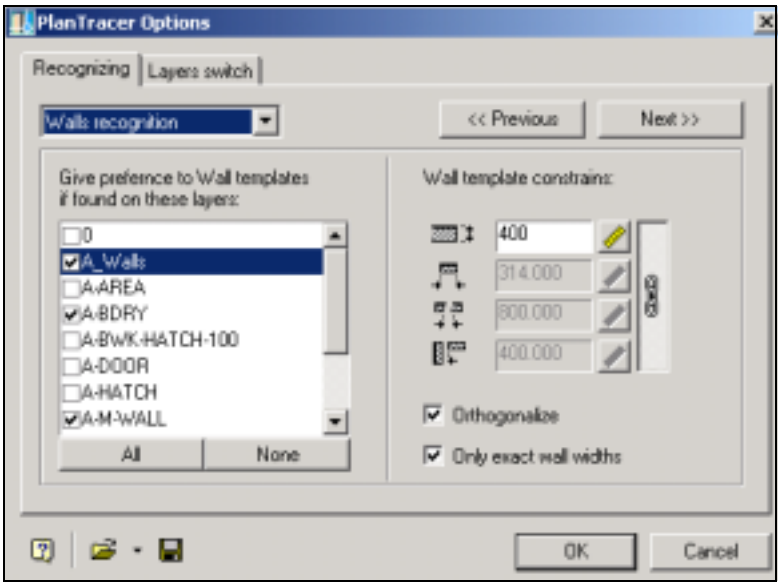
Settings' tips

Open PlanTracer Options dialog. Use following tips:

- Mark only those objects that you are going to recognize (use rooms recognition only for FM purposes, we recommend to create flats and rooms manually)

- Select tracing mode for semi-automatic recognition
- Set the recognition mode. We recommend using CAD-drawing mode to obtain precise recognition results. This is especially important for ADT.

- Set walls recognition constraints. Use Quick Start or Help and learn how to do it correctly. This is rather important setting for achieving good recognition results!



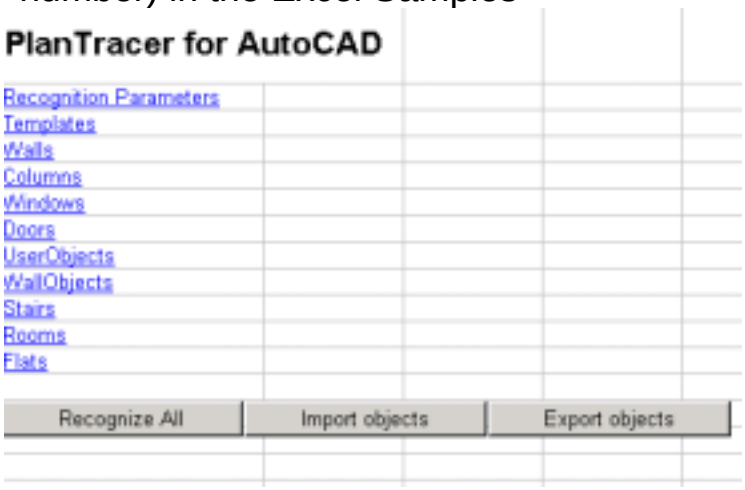
- If you are going to process raster image, setup raster recognition parameters (make sure that ImageEnabler is installed)
- Set layers buttons in Layers switch folder for convenience
- Save your settings in *.DAT file

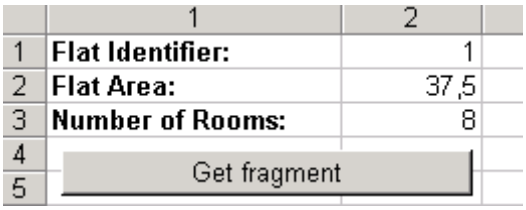
Creating rooms and flats

- Don’t forget to recognize your plan first
- Create rooms and flats manually. Use command line.
- Set properties and description of rooms and flats
- You can change the room\flat area, but you can’t ‘fix’ it (recalculate you plan automatically)

Exporting and Importing

- You can easily integrate PlanTracer with your system or database by simple programming, for example, use two Excel examples
- Don’t forget to Load macroses (in the Excel files)
- Recognize the floor plan and press Import or Get Fragment (set the flat number) in the Excel Samples



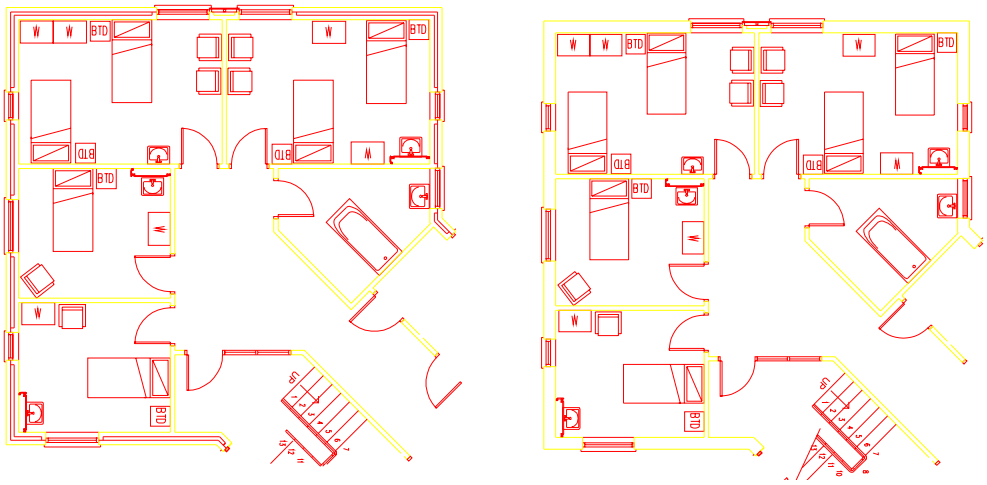


- Now the information is loaded and the link between your database (in the examples – Excel) and PlanTracer is established

What to fix if recognition results are not sufficient

- Plug-in ImageEnabler (purchased separately) to convert raster (scanned) floor plans

- Try to use another recognition mode (CAD drawing or Vectorized)
- Setup walls recognition constraints once again (‘play’ with them)
- Check templates and search patterns, correct them or add new ones if necessary
- Take into account that PlanTracer 1.0 doesn’t recognize splines and corresponding block references
- Hide confusing layers (especially it is important for walls, where you have to hide lines inside the main lines of the walls, PlanTracer can’t recognize compound and multiple walls)



- Try semi-automatic recognition (with Preview or List tracing modes) if results were unsatisfactory during auto recognition
- If you still have unsatisfactory results please contact ptsupprot@csoft.no and we will be happy to answer you in 24 hours (except Saturdays and Sundays)

LAST BUT NOT LEAST: ‘**PRACTICE MAKES PERFECT’**